WHAT WE CLAIM IS:

1. A method for drying soil in preparation for analysis including the steps of:

(a) increasing the surface area of the soil;

(b) forcing a substantially inert gas through the soil;

(c) subjecting the soil to an elevated temperature.

2. The method of claim 1 wherein the sample is prepared for analysis after approximately 1 hour of processing via steps (a) to (c).

3. The method of claim 1 wherein the sample is prepared for analysis after approximately 20 minutes of processing via steps (a) to (c).

4. The method as claimed in of any of the above claims wherein the moisture content after steps (a) to (c) is less than approximately 9% wt.

5. The method as claimed in any of the above claims wherein the increase in surface area during step (a) is completed by breaking the soil down into smaller particles by mechanical motion.

6. The method as claimed in any of the above claims wherein the mean particle size after step (a) is substantially less than 10mm.

7. The method as claimed in any of the above claims wherein the inert gas of step (b) is air.

8. The method as claimed in any of the above claims wherein the inert gas of step (b) is moisture free.

9. The method as claimed in any of the above claims wherein the inert gas of step (b) is conditioned via dehumidification,

10. The method as claimed in any of the above claims wherein the inert gas of step (b) is conditioned by use of a desiccating agent to remove moisture from the gas.

11. The method as claimed in any of the above claims wherein the inert gas of step (b) is forced across the soil particles produced from step (a).

12. The method as claimed in claim 11 wherein the inert gas is fan forced.

13. The method as claimed in claim 11 or claim 12 wherein the gas flow is less than 4 m/s.

14. The method as claimed in any of claims 11 to 13 wherein the gas flow is approximately 2 m/s.

15. The method as claimed in any of the above claims wherein the temperature to which the soil is elevated is high enough to allow sample drying without impacting on the chemical and/or physical properties to be measured.

16. The method as claimed in any of the above claims wherein the elevated temperature during step (c) ranges from approximately 20°C to 50°C.

17. The method as claimed in any of the above claims wherein the elevated temperature during step (c) ranges from approximately 30°C to 40°C.

18. The method as claimed in any of the above claims wherein the elevated temperature during step (c) is approximately 35°C.

19. The method as claimed in any of the above claims wherein the drying

equipment is preheated before step (c).

20. The method as claimed in any of the above claims wherein the method includes a further step (d) of:

(d) moving the soil.

21. The method as claimed in claim 20 wherein the particles remain moving for substantially all of the drying time.

22. An assembly for drying of soil which includes:

(a) an inert gas supply device which is capable of forcing inert gas through a soil sample;

(b) a heating element which is capable of subjecting the soil to an elevated temperature.

23. The assembly as claimed in claim 22 wherein the assembly further includes a soil crusher device which is capable of increasing the surface area of the soil.

24. The assembly as claimed in claim 22 or claim 23 where the assembly further includes a device capable of keeping the soil in motion.

25. A method of drying soil in preparation for analysis substantially as hereinbefore described and with reference to the accompanying examples and figures.

26. An assembly for drying soil in preparation for analysis substantially as hereinbefore described and with reference to the accompanying examples and figures.